AFFIDAVIT OF CARL R. GEPPERT

I, CARL R. GEPPERT, being first duly sworn, do hereby state that:

I am a Certified Public Accountant and a partner of Arthur Andersen LLP. My business address is 1225 17th Street, Suite 3100, Denver, Colorado 80202. Andersen Worldwide, with over 100,000 people, provides professional services to clients through member firms in 361 locations in 76 countries. It consists of Arthur Andersen ("AA") for audit, tax, business advisory and specialty consulting services and Andersen Consulting for global management and technology consulting. I am a member of a group at Arthur Andersen that provides audit, tax and consulting services to clients in the communications industry.

During my 18-year career, I have been almost exclusively involved in financial, regulatory and cost accounting matters in the telecommunications and utilities industries. I have served as an auditor for and consultant to clients in the telecommunications industry and currently direct my firm's telecommunications industry practice in the areas of regulatory accounting, auditing and consulting. I am our Firm's representative on the Telecommunications Subcommittee of the Public Utilities Committee of the AICPA.

PURPOSE AND SCOPE OF THE AFFIDAVIT

The purpose of this affidavit is to evaluate certain of the recommendations made by the Federal Communications Commission ("FCC") in their December 22, 1998 Draft Copy of the Final Audit Report (the "December Report") related to their audit of Ameritech's continuing property records ("CPRs") of Central Office Equipment ("COE"). Paul Charnetzki and I previously submitted affidavits in response to the FCC's Draft Report dated July 27, 1998 (the "July Report") in this matter. (Appendices A-3, A-4 and A-5). The December Report contains conclusions and recommendations based on inadequate statistical sampling methodologies and biased procedures that are not based on generally accepted auditing standards ("GAAS"). Because of the lack of adequate auditing procedures and sampling techniques, the conclusion that \$306.0 million of hardwired COE should be written-off Ameritech's plant accounts cannot be relied upon. In the December Report, the FCC apparently did not consider much, if any, of the information provided in response to the July Report. Accordingly, this affidavit will summarize the significant issues addressed in our previous affidavits (which continue to be relevant) and comment on certain "new" information contained in the December Report.

Our primary concerns with the FCC's methodology include:

- The insufficiency of the FCC's physical verification procedures for the purpose of determining any potential misstatement of Ameritech's hardwired COE plant investment (the FCC's procedures were biased in favor of only locating potential overstatement of plant investment).
- The conclusions we reached by performing certain physical verification audit procedures and reviewing supplemental information (alternative audit procedures) in cases where the FCC staff (as documented in connection with their July Report)

either could not find certain equipment items or could not verify that items found were the specific items listed in Ameritech's CPRs. The FCC did not perform or gave little weight to our "alternative audit procedures" and apparently did not take into consideration the fact that we were able to physically verify the existence of several "not found" plant items.

- The conclusions we reached by evaluating the statistical procedures used by the FCC in designing and selecting its statistical sample and in extrapolating the results of testing performed.
- The exact procedures performed in connection with the FCC's additional statistical analysis (Bayesian analysis) were not revealed or explained.
- The propriety of recording an adjustment to write-off \$306.0 million hardwired COE from Ameritech's COE plant investment accounts.
- The propriety of requiring an inventory of Ameritech's entire COE.

SUFFICIENCY OF FCC'S PHYSICAL VERIFICATION PROCEDURES (see Affidavit of Carl R. Geppert, Appendix A-3)

Physical verification audit procedures often serve as an effective substantive test of the fair presentation of telecommunications plant account balances. The results of such procedures should be considered in conjunction with other audit evidence in forming a conclusion with respect to the fair presentation of plant account balances and related transaction activity. Physical plant verification procedures must be executed carefully, however, due to the high volume of plant transactions processed in the accounting records at a company the size of Ameritech.

In performing its physical verification procedures, the FCC staff stated in its July Report that its objectives were: "to determine the extent to which Ameritech's continuing property records ("CPR") reflect the assets it uses in the provision of telecommunications services; to substantiate the investment recorded in Ameritech's plant accounts; and, in general, to determine the extent to which Ameritech is in compliance with the Commission's property record requirements." The FCC fell short of achieving its objectives in several respects, however, as discussed below.

• The FCC staff utilized Ameritech's CPRs related to COE as of July 31, 1997 as the population from which the sample items to be verified would be selected. The physical verification of such equipment items did not occur, however, until November 1997. Thus, over three months elapsed from the date of the report from which the samples of the assets to be physically verified were selected to the date the physical verification occurred. There were no procedures performed, normally termed "cutoff procedures," to account for any plant additions, retirements, adjustments, etc. that may have occurred during the time period from July 31, 1997 to the date of the physical verification (various dates in November 1997). Thus, to the extent that the FCC staff could not find equipment at the central office location during its physical verification, it is possible that such plant could have been retired subsequent to July 31, 1997 but prior to November 1997. Without performing cutoff procedures, classification of such items as "not found" would be clearly inappropriate in this instance.

• The FCC's physical verification procedures were biased in favor of only uncovering potential overstatement of plant investment in the accounting records. Instances of potential understatement were not considered. In other words, the FCC's physical testing procedures would only reveal instances where COE equipment items included on the July 31, 1997 CPRs were not in the specified location as detailed in such CPRs. A comprehensive test of the physical existence of plant assets would not only consider instances of potential overstatement, but would include procedures such as the selection of assets in the respective central offices and the tracing of such assets to the CPRs to ensure that the CPRs are not understated. Only by testing for both potential over- and understatements can one begin to form the basis for concluding as to the propriety of the telecommunications plant account balances.

- The field audit procedures followed appear to have been restrictive. Based on discussions with Ameritech personnel, the FCC auditors were on-site in each location for a period of one day there were no subsequent follow-up visits to any of the 34 central office locations. Thus, Ameritech personnel were only given a limited amount of time to locate the sampled COE equipment items that the FCC staff was attempting to physically verify. This limited window of time seems inadequate, particularly considering the fact that certain items of COE tend to be small and "built-in" to other assets, thus making these assets difficult to find at a specific time on a specific date. To the extent that sampled items were physically located after the fact, Ameritech personnel stated that the FCC staff was generally unwilling to consider such information and support in their results. This process does not seem reasonable, especially if the FCC is going to support the write-off of plant investment that has subsequently been identified--just not located during the one-day field visit.
- There appeared to be little communication of audit issues, evaluation standards or preliminary audit results throughout the FCC's audit process. Normally, Ameritech personnel would be given adequate time to respond to any preliminary audit issues and findings, and alternative procedures such as return visits to central office sites in addition to review of other supporting documentation would be performed in order to derive complete and accurate audit results. GAAS require that where unexamined items (i.e., "not found") would lead to a conclusion that the balance or class contains material misstatement, the auditor should consider alternative procedures that would provide him with sufficient evidence to form a conclusion (American Institute of Certified Public Accountants Codification of Statements on Auditing Standards, AU Section 350, Audit Sampling, paragraph 25). Per discussions with Ameritech personnel, the FCC performed no alternative procedures.
- The FCC audit concentrated only on the CPRs and not the COE plant account general ledger balances. It seems unreasonable to conclude that Ameritech's hardwired COE investment is overstated when the accounting records evidencing such investment were not reviewed. To the extent that adjustments had been made to the accounting records and not to the supporting CPR detail, for instance, the audit would not have detected such adjustments which obviously would impact any conclusion with respect to the fair presentation of the accounting records.

In summary, the FCC's limited physical verification audit procedures were not sufficient to form an opinion, in accordance with GAAS, as to the fair presentation of

Ameritech's hardwired COE plant investment. Additional quality control procedures over the physical verification tests that were performed as well as additional compliance and/or substantive audit procedures would be necessary to render such an opinion pursuant to GAAS.

REPERFORMANCE OF PHYSICAL VERIFICATION AUDIT PROCEDURES (see Affidavit of Carl R. Geppert, Appendix A-4)

As mentioned above, GAAS requires an auditor to perform alternative audit procedures before reaching a conclusion with respect to sampled transactions. The FCC apparently did not perform such procedures and, instead, have proposed an adjustment to plant investment balances by extrapolating the results of their one day field visits. At the request of Ameritech, we performed alternative procedures directed at sampled items classified by the FCC as "not found" (audit assessment code 3) in the July Report. Our procedures included the following:

- Physical verification of certain "not found" items that Ameritech contended were in service and could be physically observed,
- Review of original vendor invoices or price listings for items that were found by the FCC in a different quantity than that listed on the CPR, where Ameritech asserted that the quantity (but not the dollar amount of investment on the CPR) was incorrect, and
- Review of documentation related to the retirement of certain items that Ameritech
 asserted were in service as of July 31, 1997 (the date of the CPRs from which the FCC
 selected their sample) and retired from the CPRs prior to November 1997 (the date of
 the FCC's physical observations).

The following table reflects the quantitative results of our review and analysis as well as certain conclusions reached by Ameritech. The table reconciles the results in the FCC's July Report to the combined Ameritech and AA results related to the total number of items sampled, the number of items categorized as "not found," and the value of the "not found" sample items. The table below reflects the effect of performing additional audit procedures and does not consider any effects that may result from removing the bias in the FCC approach. In other words, this table only addresses the lack of follow up by the FCC on the exceptions noted during their limited field visits.

	# of Items	# of Items	Value of "Not Found"
	<u>Sampled</u>	Not Found	Sample Items
D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.001	1.10	†0 2 (0.1 (
Results as reported in the FCC's July Report	1,224	140	\$936,046
related to "not found" items			
Items reclassified, substantiated or removed	(5)	(25)	(386,753)
from the sample by AA			
Items reclassified by Ameritech based on	0	(6)	(23,642)
consistency argument (as contained in			
Appendix B of Ameritech's response)			
Item removed from the sample by	(1)	(1)	(9,364)
Ameritech (as contained in Appendix B to			
Ameritech's response)			
Revised results related to "not found" items	1,218	108	\$516,287

The above results, presented as a percentage of investment, indicate that the procedures performed by AA and Ameritech reduced the items classified as "not found" from approximately 8% of total sampled investment to approximately 4%.

As discussed herein and in Appendices A-3 and A-5, significant flaws in the FCC's audit procedures and underlying sampling methodologies were revealed, thus rendering the FCC's preliminary audit results unreliable. Conclusions should not be drawn with respect to the fair presentation of Ameritech's hardwired COE investment based on the procedures performed by the FCC staff. The impacts of the above results on the extrapolated error amount contained in the FCC's July Report are summarized as follows:

	Extrapolated Error	Revised
Revised Count	per FCC	Extrapolated Error
Number of Items "Not Found"	140	108
Dollar Amount of Items "Not Found"	\$936,046	\$516,287
Extrapolated Error (Point Estimate)	\$358.1 Million	\$182.6 Million
Variance of Extrapolated Error	+/- \$125.6 Million	+/- \$88.9 Million
Low-End of COE Estimated Error	\$232.5 Million	\$93.7 Million

The FCC's December Report contained a revised extrapolated error (point estimate) of \$306.0 million. Given that the changes made to the December Report did not significantly alter the comparison above and item scoring results were not provided in the December Report, the comparison above and the related arguments throughout this affidavit have not been updated from our response to the July Report.

In conclusion, our physical verification procedures resulted in different conclusions in several instances from those reached by the FCC staff. Such differences resulted in a reduction in the extrapolated error amount from that presented in the FCC's July Report and December Report. We believe that our procedures were complete and our conclusions justified. We believe the FCC may have reached similar

conclusions had they performed these additional procedures. However, these results alone are not indicative of an overstatement in Ameritech's COE plant investment based on other discussions included in this affidavit and the executive summary and affidavits included in Appendices A-1, A-3, A-4 and A-5.

EVALUATION OF THE STATISTICAL PROCEDURES USED BY THE FCC (see Affidavit of Paul F. Charnetzki, Appendix A-5)

The procedures and methods followed by the FCC in the December Report continue to have a high degree of uncertainty within the FCC sample as it relates to design, implementation, technique and logic. The December Report appears to follow the same statistical methodology as the July Report except the FCC has added a Bayesian methodology to support their conclusion. Our comments and concerns related to the July Report as found in Appendix A-5 continue to apply to the December Report.

We previously analyzed the FCC's sampling methodology, its accuracy and its extrapolation of Ameritech's hardwired COE investment based on a review of the FCC's July Report, Ameritech's population data, which was also provided to the FCC in electronic format, and the sample data derived by the FCC and put into electronic format by Ameritech from the July Report. The results of this analysis are as follows:

- The FCC excludes from the population all offices that have less than 100 records. It is highly unlikely, then, that the audit sample is representative of the true population even before the FCC adopts a sampling procedure. It is impossible to determine if the population chosen by the FCC is appropriate for the given objective.
- On page 3 of the FCC's July Report the FCC claims that they have "selected a random two-stage stratified sampling plan." However, since the FCC provides no evidence of systematic differences in the probability of finding a record or in the average missing dollar value by stratum, it makes no sense to perform a stratified sample. Further, the FCC makes use of weighted estimators, however, the unweighted estimators are more efficient in the absence of systematic strata differences. What is more troubling is that the FCC has, in fact, chosen a cluster sample -- NOT a stratified sample. As such, the FCC initiates its analysis with a flawed sampling methodology that it does not correct for. It is clear that the FCC has performed cluster sampling while erroneously calling the sample a stratified sample.
- Given that the FCC has chosen a cluster sample, the variance calculation it uses in its report is inaccurate. In fact, it is too small.
- The FCC's sample design introduces additional bias into its sample. The FCC's July Report and December Report assert that Ameritech overstates the value of its equipment because some equipment is listed on its books, but is not found in a physical audit. However, the FCC auditors never found, or even looked for, physical equipment that is not listed on the books but physically exists at the central office. The audit found only one type of error in the books -- overreporting -- and made no attempts to find the second type of error -- underreporting -- that could exist at the same time. The net effect of reporting accuracy cannot be determined without estimating both types of errors. Most of the items that the FCC identifies as an error may be a simple result of inaccuracies in the processing and fulfillment of work orders related to retirement of equipment. For example, suppose Ameritech

owns two pieces of equipment, A and B, and the work order for the retirement of A is incorrectly prepared for B, then the FCC would identify A as missing (because the books would not have it identified as retired) and make no effort to identify B (which would be listed on the books as retired).

• The FCC's sample results are inaccurate. Had the FCC performed an accurate audit, a reasonable expectation would be that all line items the FCC could not find were nonexistent. This, however, is not the case. Upon closer examination by AA, many of the line items the FCC claimed not to exist, do, in fact exist. This fact alone introduces an incalculable degree of error into the sample results.

In conclusion, we have observed a high degree of uncertainty within the FCC sample as it relates to design, implementation, technique and logic. The most troublesome of which are the errors we discovered while reperforming certain aspects of the audit. As a result of the above concerns, we find no basis to extrapolate beyond the lower bound of the point estimate of \$93.7 million. However, given the flawed audit procedures used to arrive at the extrapolated results, such extrapolated results should not be represented as a basis for plant write-offs or overstatements.

IMPACTS OF PERFORMING A BAYESIAN ANALYSIS

The FCC explains that they performed an additional statistical analysis using a Bayesian approach in the December Report. The exact procedures used in the Bayesian analysis were not explained or revealed in this report. However, it is unlikely that the use of the Bayesian approach would completely correct the errors in design, implementation, technique or logic as discussed above. In most situations, Bayesian analysis with a noninformative prior distribution yields numerical results similar to numerical results from classical statistics. Without further information regarding the Bayesian approach taken by the FCC, the conclusions drawn from our review of the December Report would be similar to our conclusions drawn from our review of the July Report.

PROPRIETY OF RECORDING AN ADJUSTMENT TO WRITE-OFF ASSETS BASED ON THE RESULTS OF THE FCC'S AUDIT PROCEDURES

In its December Report, the FCC recommends that Ameritech be required to write-off \$306.0 million from its COE plant balance to remove the estimated cost of its missing hardwired equipment from its COE accounts. This recommendation is inappropriate for a number of reasons.

First and foremost, the FCC's insufficient physical verification and underlying statistical sampling procedures do not provide an appropriate basis for a write-off as discussed above.

Second, auditing standards state that where unexamined items (i.e., "not found") would lead to a conclusion that the balance or class contains material misstatement, the auditor should consider alternative procedures that would provide him with sufficient evidence to form a conclusion (American Institute of Certified Public Accountants Codification of Statements on Auditing Standards, AU Section 350, Audit Sampling, paragraph 25). Per discussions with Ameritech personnel, the FCC performed no

alternative procedures. In addition, the FCC, as discussed above and in Appendix A-4, substantially ignored the results of AA's alternative procedures and Ameritech's analysis of inconsistent scoring.

Third, it would be premature to require an adjustment prior to the performance of additional audit procedures as discussed above. Recording the write-off currently as recommended by the FCC could quite probably result in a subsequent write-up upon completion of these additional audit procedures. This is particularly true given that the FCC's sampling procedures only looked for overstatements in the COE CPRs. In addition, the FCC's adjustment would be based on the CPRs at one point in time while the additional procedures would relate to a future, or multiple future, points in time. This timing difference would unduly complicate the recognition of any adjustment resulting from the additional procedures.

In conclusion, the recognition of a write-off based on the results of the FCC's COE CPR audit cannot be justified. In addition, AA issues opinions on the fair presentation of each Ameritech Operating Company's ("AOC") ARMIS Report 43-03. If the AOCs were required to recognize a write-off that is not justifiable, the impacts on these opinions, and the conclusions reached therein, would need to be considered.

PROPRIETY OF REQUIRING A COMPLETE PHYSICAL INVENTORY OF AMERITECH'S COE

Recommending a 100% physical verification of Ameritech's COE is unwarranted. This drastic, costly step should only be considered if it was clear that Ameritech has no internal controls over the acquisition, physical safeguarding and retirement of its plant investment. For the reasons stated herein, there are numerous flaws in the FCC's audit approach and its conclusions are not supported based on GAAS or common statistical sampling theory. As such, there is no basis to conclude that there is a breakdown in Ameritech's internal controls in the CPR area that would warrant a 100% physical verification of COE.

erification of COE.
Any additional substantive audit procedures, such as the performance of a emplete physical verification of all COE as recommended by the FCC, should not be erformed pending the results of any review of Ameritech's procedures and controls with respect to hardwired COE.
hereby swear, under penalty of perjury, that the foregoing is true and correct, to thest of my knowledge and belief.
Carl R. Geppert
ubscribed and sworn to before me this 8th day of January 1999.

Notary Public

REVIEW OF THE FEDERAL COMMUNICATIONS COMMISSION AUDIT OF THE CONTINUING PROPERTY RECORDS OF AMERITECH AS OF JULY 31, 1997 DRAFT REPORT OF AUDIT FINDINGS

Prepared by Arthur Andersen LLP

I. EXECUTIVE SUMMARY

Arthur Andersen LLP ("AA") was engaged by Ameritech Corporation ("Ameritech" or "the Company") to evaluate certain aspects of the Federal Communications Commission's ("FCC") draft audit report issued to Ameritech on July 27, 1998 related to their audit of the Company's continuing property records ("CPRs") of Central Office Equipment ("COE"). A detailed discussion of the draft report and AA's evaluation of certain aspects of the draft report are included in the attached affidavits (Appendices A-3, A-4 and A-5). This executive summary should be read in conjunction with those affidavits.

According to the FCC's draft report, Ameritech's hardwired COE investment is overstated by \$358.1 million¹ (plus or minus \$125.6 million). As discussed herein and in the attached affidavits (Appendices A-3, A-4 and A-5), significant flaws in the FCC's audit procedures and underlying sampling methodologies were revealed, thus rendering the above preliminary audit results unreliable. Conclusions should not be drawn with respect to the fair presentation of Ameritech's hardwired COE investment based on the procedures performed by the FCC staff. As a further indication of the lack of reliability of the above extrapolated error amount, the combined results of AA's review and further analysis performed by Ameritech to date indicate that the point estimate of the COE extrapolated error should be reduced to \$182.6 million (plus or minus \$88.9 million). Further, because of a number of issues involving the FCC's sample design, implementation, technique and logic, there is no basis to extrapolate beyond the lower bound of the point estimate of \$93.7 million.

AA's work consisted primarily of a review and analysis of the audit procedures performed by the FCC staff, review of the coding of certain items as "not found" by the FCC, and review and analysis of statistical methods utilized in deriving the estimated overstatements of COE plant investment detailed in the draft audit report. The primary procedures performed by AA included:

- 1. Evaluation of the adequacy and completeness of the audit procedures performed by the FCC for the purpose of rendering an opinion on the fair presentation of the COE telecommunications plant.
- 2. Reperformance of physical verification audit procedures and review of supplemental information in cases where the FCC staff either could not find

¹ As a result of the FCC's physical verification of hardwired COE, the draft report concludes that Ameritech's hardwired COE plant investment is overstated by approximately \$358.1 million. In addition, the FCC concluded that \$260.7 million of COE CPR line items, labeled "Undetailed Investment", did not exist. AA was engaged primarily to review the process the FCC used to determine the \$358.1 million overstatement of hardwired COE investment. Ameritech's response to the draft report addresses the undetailed COE investment.

Prepared by Arthur Andersen LLP

- certain equipment items or could not verify that items found were the specific items listed in Ameritech's CPRs.
- 3. Evaluation of the statistical procedures used by the FCC in designing and selecting its statistical sample and in extrapolating the results of testing performed.

Our findings resulting from the performance of the above procedures are summarized as follows:

- 1. The FCC staff's audit procedures were not adequate under generally accepted auditing standards ("GAAS") to provide staff a reasonable basis for forming an opinion as to the fair presentation of Ameritech's COE plant investment.
- 2. AA was able to substantiate the existence of certain COE equipment items coded as "not found" by the FCC through physical verification or review of supplemental information. The results of our testing and the related extrapolated impacts are summarized in the tables below.
- 3. The statistical procedures used by the FCC in designing and selecting its statistical sample and in extrapolating the results of testing performed were fundamentally flawed and inherently biased. Because of the FCC's flawed methodology, their results are unreliable.

The following table reflects the quantitative results of our review and analysis to date as well as certain conclusions reached by Ameritech. The table reconciles the FCC's and the combined Ameritech and AA results related to the total number of items sampled, the number of items categorized as "not found," and the value of the "not found" sample items.

Prepared by Arthur Andersen LLP

	# of Items Sampled	# of Items Not Found	<u>Value of "Not</u> <u>Found" Sample</u> <u>Items</u>
Results as reported by the FCC related to	1,224	140	\$936,046
"not found" items			
Items/Amounts reclassified by AA	0	(15)	(208,138)
through physical verification (Category A			
in the attached affidavit of Carl R. Geppert)			
Items substantiated by AA through review	0	(5)	(131,323)
of supplemental information (Category B			
in the attached affidavit of Carl R. Geppert)			
Items removed from the sample by AA	(5)	(5)	(47,292)
(Category C and portable items as	, ,	, ,	, ,
discussed under Category A in the			
attached affidavit of Carl R. Geppert)			
Items/Amounts reclassified by Ameritech	0	(6)	(23,642)
based on consistency argument (as		, ,	, ,
contained in Appendix B to Ameritech's			
response)			
Item removed from the sample by	(1)	(1)	(9,364)
Ameritech (as contained in Appendix B to	` ,	` ,	` ,
Ameritech's response)			
Revised results related to "not found"	1,218	108	\$516,287
items			

Due to the nature of the FCC sampling design and implementation errors, the sample the FCC created is not designed so that one can extrapolate reliable conclusions to the population. Despite these flaws, we have recalculated the statistical estimators that the FCC provided in their Draft Report. These recalculations are based on the revised results related to "not found" items as summarized above.

Prepared by Arthur Andersen LLP

	Extrapolated Error	Revised
Revised Count	<u>per FCC</u>	Extrapolated Error
Number of Items "Not Found"	140	108
Dollar Amount of Items "Not Found"	\$936,046	\$516,287
Extrapolated Error (Point Estimate)	\$358.1 million	\$182.6 million
Variance of Extrapolated Error	+/- \$125.6 million	+/- \$88.9 million
Low-End of COE Estimated Error*	\$232.5 million	\$93.7 million

^{*} Due to the high degree of uncertainty with the FCC sample as it relates to design, implementation, technique and logic, there is no basis to extrapolate beyond the lower bound of the point estimate of COE estimated error.

The attached affidavits (Appendices A-3, A-4 and A-5) discuss the procedures and analyses performed by AA and the results of such procedures and analyses in further detail.

Prepared by Arthur Andersen LLP

BACKGROUND

In November 1997, the Accounting Safeguards Division of the Common Carrier Bureau of the Federal Communications Commission ("FCC") conducted a physical verification of a sample of Ameritech Corporation's ("Ameritech" or "the Company") hardwired central office equipment ("COE"). The scope of the FCC's verification process included the verification of selected hardwired COE equipment items in 34 central offices throughout the Ameritech region with a total of 1,224 items sampled. The sampled items were selected from Ameritech's continuing property records ("CPRs") as of July 31, 1997.

The results of the FCC's audit procedures related to each sampled item were assessed using the following categories:

Code 1.	Item(s) found in sufficient quantity in the CPR-stated location.
Code 2.	Item(s) matching the CPR description found in another location
	(within the central office).
Code 3.	Item(s) not found or not found in sufficient quantity.
Code 4.	Item(s) could not be verified as either found or not found for
	various reasons.

Based on their initial results, the FCC estimated that 10.78% and 6.29% (total of 17.07%) of the records sampled should be classified as codes 3 and 4, respectively. In January 1998, the FCC shared their initial evaluation of each of the sampled items with Ameritech and gave Ameritech the opportunity to provide additional supporting documentation for any items the FCC had initially categorized as a 3 or 4. Throughout January and February 1998, Ameritech provided additional documentation to the FCC. Based on the additional supporting documentation submitted to the FCC, Ameritech determined that the percentage of sampled items categorized as either a 3 or 4 should be reduced to 6.12% (3.84% categorized as a 3; 2.28% categorized as a 4).

On July 27, 1998, the FCC issued its draft audit report which contained the following main preliminary findings:

• 23.9% of the records that were sampled were seriously deficient and did not comply with the FCC's rules (codes 2, 3 and 4). Of these deficient records, 11.4% described equipment that could not be found (code 3), and the remaining 12.5% could not be verified with certainty because the equipment the FCC was shown could not be matched to the record in some important respect such as location or description (codes 2 and 4). Based on their extrapolation of the code 3 items, the FCC estimated that Ameritech's hard-wired COE plant investment was overstated by approximately \$358.1 million.

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• 4,000 line items within the CPRs contained no description of either the equipment or its location (referred to as undetailed investment or unallocated other costs). The undetailed investment and unallocated other costs amounted to \$260.7 million and \$64.6 million, respectively.

Based on these preliminary findings, the FCC concluded that Ameritech's COE plant balances were overstated by \$618.8 million (the sum of the \$358.1 million and \$260.7 million discussed above). The FCC elected to defer a conclusion on the \$64.6 million of unallocated other costs.

PURPOSE OF ARTHUR ANDERSEN LLP AFFIDAVITS

Arthur Andersen LLP ("AA") was retained by Ameritech to perform the following primary procedures with respect to the FCC's draft audit report:

- 4. Evaluate the adequacy and completeness of the audit procedures performed by the FCC for the purpose of rendering an opinion on the fair presentation of the COE telecommunications plant.
- 5. Reperform physical verification audit procedures and review supplemental information in certain cases where the FCC staff either could not find certain equipment items or could not verify that items found were the specific items listed in Ameritech's CPRs. These procedures were performed on certain of the items that were categorized as "not found" by the FCC with the focus being on those items with the highest in-place costs. These items will be referred to as "disputed property items" throughout the attached affidavits (Appendices A-3, A-4 and A-5).
- 6. Evaluate the statistical procedures used by the FCC in designing and selecting its statistical sample and in extrapolating the results of testing performed.

Carl R. Geppert ("Geppert") evaluated Items 1 and 2 above, and Paul F. Charnetzki ("Charnetzki") evaluated Item 3. The results of our procedures are discussed in the attached affidavits.

AFFIDAVIT OF CARL R. GEPPERT

I, CARL R. GEPPERT, being first duly sworn, do hereby state that:

I am a Certified Public Accountant and a partner of Arthur Andersen LLP. My business address is 1225 17th Street, Suite 3100, Denver, Colorado 80202. Andersen Worldwide, with over 100,000 people, provides professional services to clients through member firms in 361 locations in 76 countries. It consists of Arthur Andersen for audit, tax, business advisory and specialty consulting services and Andersen Consulting for global management and technology consulting. I am a member of a group at Arthur Andersen that provides audit, tax and consulting services to clients in the communications industry.

During my 18-year career, I have been almost exclusively involved in financial, regulatory and cost accounting matters in the telecommunications and utilities industries. I have served as an auditor for and consultant to clients in the telecommunications industry and currently direct my firm's telecommunications industry practice in the areas of regulatory accounting, auditing and consulting. I am our Firm's representative on the Telecommunications Subcommittee of the Public Utilities Committee of the AICPA.

Refer to Appendix A-3, Attachment 1 for my Curriculum Vitae.

PURPOSE AND SCOPE OF AFFIDAVIT

The purpose of this affidavit is to evaluate the adequacy and completeness of the audit procedures performed by the Federal Communications Commission ("FCC"), as described in the FCC's draft report of its <u>Audit of the Continuing Property Records of Ameritech - As of July 31, 1997</u> (the "FCC Draft Report"), for the purpose of rendering an opinion on the fair presentation of Ameritech's investment in COE telecommunications plant. This affidavit will address:

- Appropriate audit procedures which may be performed to provide the auditor a reasonable basis for rendering an opinion as to the fair presentation, in all material respects, of Ameritech's COE plant investment balance pursuant to generally accepted auditing standards ("GAAS"), and
- The sufficiency of the FCC's physical verification procedures for the purpose of determining any potential overstatement of Ameritech's hardwired COE plant investment.

This affidavit will not address the propriety of statistical sampling methods used by the FCC in performing its COE CPR audit procedures. The propriety of such sampling methods and procedures will be addressed in the affidavit of Paul F. Charnetzki included as Appendix A-5 (the "Charnetzki affidavit").

AUDIT PROCEDURES RELATED TO TELECOMMUNICATIONS PLANT

Generally Accepted Auditing Standards

Audit procedures related to a specific account balance or class of transactions cannot be considered in isolation in forming a conclusion with respect to such account balance or group of transactions. This is because audit procedures performed related to other financial statement accounts might also provide evidence relative to the fair presentation of the account balance in question. For example, tests of the propriety of the balance in accounts payable may provide evidence with respect to the proper recording of both telecommunications plant and expense transactions. Such tests provide audit evidence with respect to both the debits and credits recorded in the company's general ledger.

Under GAAS, audit procedures and the results of such procedures should be considered in light of both audit risk and materiality.² The auditor should design the audit plan "to obtain sufficient competent evidential matter to provide him or her with a reasonable basis for forming an opinion."³ "Evidential matter supporting the financial statements consists of the underlying accounting data and all corroborating information available to the auditor."⁴ Audit results should take into account the results of various procedures performed and evidential matter gathered. No individual audit procedure is necessarily indicative of a material misstatement in an account balance or class of transactions - other corroborating evidence must be obtained. Without such evidence, it would be inappropriate for the auditor to conclude with respect to the fair presentation of an account balance such as telecommunications plant.

Example Telecommunications Plant Audit Procedures

Audit testing in the telecommunications plant area should consider tests of both the system of internal controls related to telecommunications plant (compliance testing) as well as the plant account balances (substantive testing). It should be noted that while telecommunications plant is significant to the Company's balance sheet, its significance in the rate-setting process has diminished significantly due to the adoption of price cap regulation and the use of mass asset accounting and remaining life depreciation methods.

In addition to controls over the maintenance of property records, internal controls related to the following areas should be considered in the telecommunications plant area:

- Telecommunications plant additions
- Telecommunications plant retirements

² AICPA, Statements on Auditing Standards, AU Section 312: Audit Risk and Materiality in Conducting an Audit.

³ AICPA, Statements on Auditing Standards, AU Section 326: Evidential Matter, "Sufficiency of Evidential Matter"

⁴ AICPA, Statements on Auditing Standards, AU Section 326: Evidential Matter, "Nature of Evidential Matter."

- Telecommunications plant job estimate/work order process
- Transfers of plant assets from plant under-construction to plant in-service
- Telecommunications plant adjustments
- Physical safeguards over telecommunications plant assets
- Periodic physical inventories of plant assets and resultant processing of plant verification adjustments (both over- and understatements)
- Capital versus expense classifications of costs
- Capitalization of salaries, benefits and other overhead costs to telecommunications plant accounts (and related testing of employee time reporting to capital accounts)
- Capitalization of interest
- Capital budgeting controls and investigation of budget versus actual variances
- Process for evaluating the net realizable value (potential impairment) of plant assets
- Cash disbursements
- Depreciation
- Reconciliations of underlying supporting documentation and records to the accounting records (general ledger)
- Testing of the electronic data processing (EDP) controls over specific application systems through which significant plant transactions are processed

Note that the above neither represents an all-inclusive list of procedures to be considered nor would each area be considered during every audit. The degree of testing should always be determined based on the auditor's judgment.

Substantive testing of telecommunications plant transactions in the above areas and of the year-end balances in various plant accounts may also be performed. Tests of physical verification of plant assets would often be performed during the substantive testing phase of the audit of telecommunications plant. The above tests would routinely involve both sampling applications (such as the procedures performed by the Accounting Safeguards Division) and nonsampling audit procedures. The results of all relevant procedures should be considered collectively in forming a conclusion with respect to an account balance or class of transactions.

Internal Controls - Cost/Benefit Considerations

As noted above, the results of any individual audit procedure should not be considered in isolation when forming an opinion on an account balance or class of transactions. Various audit tests will uncover errors in recordkeeping and/or the accounting records -- in many cases, these errors may be detected and corrected by other internal control procedures. Simply stated, any system of internal controls is not without limitations. "Internal control, no matter how well designed and operated, can provide only reasonable assurance to management and the board of directors regarding achievement of an entity's control objectives. Another limiting factor is that the cost of

an entity's internal control should not exceed the benefits that are expected to be derived."⁵

In the telecommunications plant area, given the magnitude of the plant balances and the significant number of transactions processed throughout the year, it is not unreasonable to assume that certain errors may occur and not be detected by the Company's system of internal controls. In fact, it is our understanding that plant verification procedures performed by the Company over time have routinely uncovered both over- and understatements of plant assets. Adjustments for such differences have been recorded, as appropriate, in the Company's accounting records. This plant verification process has served as an effective control procedure, not as an immediate indicator of large-scale misstatements of the plant accounting records.

EVALUATION OF FCC PHYSICAL VERIFICATION AUDIT PROCEDURES

Physical verification audit procedures often serve as an effective substantive test of the fair presentation of telecommunications plant account balances. As discussed above, the results of such procedures should be considered in conjunction with other audit evidence in forming a conclusion with respect to the fair presentation of plant account balances and related transaction activity. Physical plant verification procedures must be executed carefully, however, due to the high volume of plant transactions processed in the accounting records at a company the size of Ameritech.

In performing its physical verification procedures, the FCC staff stated that its objectives were: "to determine the extent to which Ameritech's continuing property records ("CPR") reflect the assets it uses in the provision of telecommunications services; to substantiate the investment recorded in Ameritech's plant accounts; and, in general, to determine the extent to which Ameritech is in compliance with the Commission's property record requirements." The FCC fell short of achieving its objectives in several respects, however, as discussed below. As noted above, the statistical methods and procedures will be addressed in the Charnetzki affidavit.

First, the FCC staff utilized Ameritech's CPRs related to COE as of July 31, 1997 as the population from which the sample items to be verified would be selected. The physical verification of such equipment items did not occur, however, until November 1997. Thus, a significant period of time elapsed from the date of the records being verified to the physical verification date. There were no procedures performed, normally termed "cutoff procedures," to account for any plant additions, retirements, adjustments, etc. that may have occurred during the time period from July 31, 1997 to the date of the physical verification (various dates in November 1997). Thus, to the extent that the FCC staff could not find equipment at the central office location during its physical verification, it is certainly possible that such plant could have been retired subsequent to July 31, 1997 but prior to November 1997. Classification of such items as "not found" would be clearly inappropriate in this instance.

The time elapsed between the date of the CPR records (July 31, 1997) and the Arthur Andersen physical verification procedures described in my subsequent affidavit

⁵ AICPA, Statements on Auditing Standards, AU Section 319: Internal Control in a Financial Statement Audit, "Limitations of an Entity's Internal Control."

⁶ FCC Draft Audit Report, "Audit of the Continuing Property Records of Ameritech As of July 31, 1997," issued July 27, 1998 (hereinafter referred to as the "FCC Draft Report").

at Appendix A-4 (August 1998) was even greater. As a result, we performed alternative procedures in connection with our verification process, such as reviewing supporting documentation related to the sampled items and physically verifying current CPR records, in order to attempt to account for the elapsed time of over one year. We were able, however, to determine in several cases that sampled items could in fact be found contrary to the FCC staff's conclusions. Refer to Appendix A-4 that describes the physical verification procedures performed by Arthur Andersen and the results of such procedures.

Secondly, the FCC's physical verification procedures were solely directed at detecting instances of potential overstatement in the plant accounting records. Instances of potential understatement were not considered. In other words, the FCC's physical testing procedures would only reveal instances where COE equipment items included on the July 31, 1997 CPRs were not in the specified location as detailed in such CPRs. A comprehensive test of the physical existence of plant assets would not only consider instances of potential overstatement, but would include procedures such as the selection of assets in the respective central offices and the tracing of such assets to the CPRs to ensure that the CPRs are not understated. Only by testing for both potential over- and understatements can one begin to form the basis for concluding as to the propriety of the telecommunications plant account balances.

In addition to the above flaws in the physical verification test design, the field audit procedures followed appear to have been restrictive. Per discussions with Ameritech personnel, the FCC auditors were on-site in each location for a period of one day - there were no subsequent follow-up visits to any of the 34 central office locations. Thus, Company personnel were only given a limited amount of time to locate the sampled COE equipment items that the FCC staff was attempting to physically verify. This limited window of time seems inadequate, particularly considering the fact that certain items of COE tend to be small and "built-in" to other assets, thus making these assets difficult to find. To the extent that sampled items were physically located after the fact, Company personnel stated that the FCC staff was generally unwilling to consider such findings in their results. This process does not seem reasonable. In addition, there appeared to be little communication of audit issues, evaluation standards or preliminary audit results throughout the FCC's audit process. Normally, Company personnel would be given adequate time to respond to any preliminary audit issues and findings, and alternative procedures such as return visits to central office sites in addition to review of other supporting documentation would be performed in order to derive complete and accurate audit results.

Finally, it should be noted that the FCC audit concentrated only on the CPRs and not the COE plant account general ledger balances. It seems unreasonable to conclude that the Company's hardwired COE investment is overstated when the accounting records evidencing such investment were not reviewed. To the extent that adjustments had been made to the accounting records and not to the supporting CPR detail, for instance, the audit would not have detected such adjustments which obviously would impact any conclusion with respect to the fair presentation of the accounting records.

As in the above section, the discussion of the sufficiency of the FCC's audit procedures is not meant to be all-inclusive. As we did not have access to the FCC's audit program or the related audit workpapers, a complete evaluation of the sufficiency of procedures performed could not be performed.

CONCLUSION

In summary, the FCC's limited physical verification audit procedures were not sufficient to form an opinion, in accordance with GAAS, as to the fair presentation of the
Company's hardwired COE plant investment. Additional quality control procedures
over the physical verification tests that were performed as well as additional compliance
and/or substantive audit procedures would be necessary to render such an opinion
pursuant to GAAS.
I hereby swear, under penalty of perjury, that the foregoing is true and correct, to the
best of my knowledge and belief.
Carl R. Geppert
Subscribed and sworn to before me this 8th day of January 1999.
Notary Public
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AFFIDAVIT OF CARL R. GEPPERT

I, CARL R. GEPPERT, being first duly sworn, do hereby state that:

I am a Certified Public Accountant and a partner of Arthur Andersen LLP. My business address is 1225 17th Street, Suite 3100, Denver, Colorado 80202. Andersen Worldwide, with over 100,000 people, provides professional services to clients through member firms in 361 locations in 76 countries. It consists of Arthur Andersen for audit, tax, business advisory and specialty consulting services and Andersen Consulting for global management and technology consulting. I am a member of a group at Arthur Andersen that provides audit, tax and consulting services to clients in the communications industry.

During my 18-year career, I have been almost exclusively involved in financial, regulatory and cost accounting matters in the telecommunications and utilities industries. I have served as an auditor for and consultant to clients in the telecommunications industry and currently direct my firm's telecommunications industry practice in the areas of regulatory accounting, auditing and consulting. I am our Firm's representative on the Telecommunications Subcommittee of the Public Utilities Committee of the AICPA.

Refer to Appendix A-3, Attachment 1 for my Curriculum Vitae.

PURPOSE AND SCOPE OF AFFIDAVIT

The purpose of this affidavit is to describe the procedures performed by Arthur Andersen ("AA") at the request of Ameritech Corporation ("Ameritech") related to the Federal Communications Commission's ("FCC") draft report of its <u>Audit of the Continuing Property Records of Ameritech - As of July 31, 1997</u> (the "FCC Draft Report"). Specifically, AA reperformed certain physical verification audit procedures and reviewed supplemental information in cases where the FCC staff either could not find certain equipment items or could not verify that items found were the specific items listed in Ameritech's CPRs. My affidavit, and the attachments thereto, will explain, in detail, the following:

- 1. The procedures AA performed on each of the disputed property items as defined in Appendix A-2,
- 2. The conclusions reached by AA related to the physical existence of each of the disputed property items, and
- 3. The impacts of AA's conclusions on the sample and error and related extrapolation.

AA PROCEDURES PERFORMED

Our procedures were directed at sampled items classified by the FCC staff as "not found" (audit assessment code 3). We did not reperform physical verification procedures on "unverifiable assets," specifically items matching the CPR description found in other locations within the central office (audit assessment code 2). Ameritech

asserts, and we concur, that the central office location (not the specific bay, shelf and position) is sufficient detail as to an asset's location pursuant to the Part 32 Rules. Thus, we consider such assets scored a 2 as "found" (similar to those items coded a 1) for purposes of this affidavit. It should be noted that the objective of maintaining property records - to document the cost of assets used in providing service to customers - is satisfied and the accounting records are fairly stated in such instances where in-service assets are located within the designated central office but in a different location from that listed on the CPR within that office.

The procedures performed were dependent on each disputed property item's specific situation. The types of situations identified and the related procedures performed can best be broken down into the following categories:

Category A

Category A items consist of those items classified as "not found" by the FCC which the Company contends are in service and can be physically observed. There were 28 of these disputed property items with an "In-Place" cost of \$339,498. This category includes disputed property items which the Company asserted could be found in locations other than that listed on the CPR as well as items for which the description on the CPR was inadequate to identify the item at the time of the FCC's physical verification.

For these disputed property items, AA attempted to physically verify the existence of the disputed property items at the appropriate locations. In preparation for the physical verification, AA met with Company engineers responsible for COE hardwired items to obtain an understanding of each disputed property item's description (pre-description). AA performed the following procedures when physically verifying the disputed property items:

- Compared the physical appearance of the item to the disputed property item's CPR description or pre-description, as available.
- Compared the actual physical location and quantity of the disputed property item to the location and quantity on the CPR.
- Assessed the reasonableness of the physical state of the disputed property item given the vintage year indicated on the CPR.
- Obtained a signed statement from the on-site engineer at each location attesting to the valid existence of the disputed property items at that specific central office location.
- Counted the total number of items in the central office that matched the disputed property item description and compared that to the total number of items listed under the CPR number related to the disputed property item.
- Photographed the disputed property item we physically verified during our onsite visit.

Category B

Category B items include those items that were found by the FCC in a different quantity than that listed on the CPR, where the Company asserted that the quantity (but

not the dollar amount of investment) on the CPR was incorrect. The FCC categorized these items as "not found" with partial credit of the in-place amount given based on the quantity physically verified and the total quantity for the sampled item per the CPR. There were 10 of these disputed property items with an "In-Place" cost of \$287,110. For these disputed property items, AA reviewed original vendor invoices or price listings related to the items in question and compared them to the material costs listed in the CPR for the disputed property item.

Category C

Category C items include those not found by the FCC during their November 1997 site visits which the Company asserts were in service as of July 31, 1997 (the date of the CPRs from which the FCC selected their sample) and retired from the CPRs prior to November 1997. There were 3 of these disputed property items with an "In-Place" cost of \$23,301. For these disputed property items, AA reviewed documentation related to the retirement of each of the items in question.

RESULTS OF AA PROCEDURES

Attachments 1, 2 and 3 contain the detailed results of performing the procedures discussed above on each of the disputed property items included in Categories A, B and C, respectively. General observations related to the results of our testing in each category are discussed below:

Category A

Generally, for the Category A items, our testing resulted in one of the four following scenarios:

- 1. The coding of the disputed property items was changed from a three (not found) to a one (found in the appropriate CPR location), two (found but in a different location within the central office), or four (unverifiable),
- 2. The disputed property items remained classified as a three with a different amount of partial credit given,
- 3. The disputed property items remained classified as a three as it could not be found by AA, or
- 4. The disputed property items were removed from the sample.

In the fourth scenario above, there were two equipment items scored a 3 by the FCC that are portable in nature. These items are included in the records of one central office, but are available for use at multiple central offices. When attempting to physically verify these items, they could reasonably be at central office locations other than that listed on the CPR. In addition, on page 4 of the Executive Summary in the FCC Draft Report the FCC states that: "The hard-wired equipment category contains large permanent equipment requiring complicated installation such as telephone switches and circuit equipment." The FCC goes on to say in the Executive Summary that: "We did not focus our efforts on the Plug-In Equipment category, . . . because of the nature of the items in

these categories and the manner in which Ameritech maintains the continuing property records for them. For example, plug-in units are very portable and their locations are not individually identified in Ameritech's CPR. Consequently, an audit based upon the physical inspection of such items requires a different approach than was used for the hardwired equipment." An acceptable approach to handling these items would have been to remove them from the sample and select a replacement. Even though a replacement was not selected at the time of the physical observation for these two items, we removed the items from the sample. Given the relatively large magnitude of the original sample size, this is a reasonable and appropriate approach. These two items had "In-Place" costs that totaled \$27,669.

Category B

Generally, for Category B items, our testing resulted in either no change to the FCC's test results or the reclassification of the disputed property item from a three to a new coding category (Code 1A).

For the items where there was no change to the FCC's score, the Company was not able to find appropriate supporting documentation at this time.

The remaining items were reclassified to a new code 1A. Code 1A items are those items matching the CPR description that were found in a quantity consistent with the CPR material costs, but inconsistent with the CPR quantity. In other words, a Code1A refers to situations where the CPR quantity was inaccurate and did not match the CPR material costs. In these instances, we reviewed documentation from the equipment vendors evidencing the per quantity price of equipment items verified. To the extent that appropriate quantities were physically verified by the FCC staff (as evidenced by the fact that partial credit was given for these items) and material costs were supported by vendor documentation, we classified these items as Code 1A.

Category C

For the three Category C items, we reviewed documentation from the PICS/DCPR system that indicated the items had been retired from the system prior to the FCC's on-site visit in November 1997. As it is impossible to prove if the items were there prior to their retirement from the system, replacements should have been selected for testing. As replacements were not selected by the FCC staff, we removed the items from the sample. Given the relatively large magnitude of the original sample, this is a reasonable and appropriate action. The "In-Place" costs for these items total \$23,301.

Summary Results

Below is a summary of the results discussed above and included in Attachments 1, 2 and 3:

		Disp
	# of Items	uted
		Amount
Category A disputed property items*	28	\$337,217
Category A disputed property items reclassified by AA through physical verification**	15	208,138
Category B disputed property items*	10	150,667
Category B disputed property items substantiated by AA through review of supplemental information**	5	131,323

^{*} The disputed amount represents the amount categorized as "not found" by the FCC; as such it takes into consideration items where partial credit was given by the FCC.

In addition to the observations summarized above and discussed in detail in Attachments 1,2 and 3, one other general observation can be made related to situations where our count of an item exceeded the total CPR quantity. As part of our testing of Category A items, we obtained a complete listing of items within a disputed property item's CPR. We then counted all of the equipment in the central office that matched the description of the disputed property item. In four instances, our physical counts of items included in the CPR exceeded the quantities of such items identified in the CPR. This would indicate that the total CPRs for these four disputed property items are understated. For purposes of our testing, we reflected the items as a code 1 or 2 (items found within the central office location) at the quantity listed on the CPRs. Although there is a basis for including the impacts of the potential understatement in the results of our testing, for purposes of being conservative, we did not do so. The disputed amounts associated with these four items totaled \$30,705.

IMPACTS OF AA PROCEDURES ON FCC REPORTED RESULTS

The following table reflects the quantitative results of our review and analysis as well as certain conclusions reached by Ameritech. The table reconciles the FCC's and the combined Ameritech and AA results related to the total number of items sampled, the number of items categorized as "not found," and the value of the "not found" sample items.

^{**}The disputed amount represents the difference between the amounts categorized as "not found" by the FCC versus the amounts categorized as "not found" by AA.

			<u>Value</u>
	# of Items Sampled	# of Items Not Found	<u>of</u>
			<u>"Not</u>
			Found"
			<u>Sample</u>
			<u>Items</u>
Results as reported by the FCC related to	1,224	140	\$936,046
"not found" items			
Category A items reclassified by AA	0	(15)	(208,138)
Category B items substantiated by AA	0	(5)	(131,323)
Category C disputed property items	(3)	(3)	(19,623)
removed from the sample			
Removal of portable items from the sample	(2)	(2)	(27,669)
Items reclassified by Ameritech based on	0	(6)	(23,642)
consistency argument (as contained in			
Appendix B of Ameritech's response)			
Item removed from the sample by	(1)	(1)	(9,364)
Ameritech (as contained in Appendix B to			
Ameritech's response)			
Revised results related to "not found"	1,218	108	\$516,287
items			

As discussed herein and in Appendices A-3 and A-5, significant flaws in the FCC's audit procedures and underlying sampling methodologies were revealed, thus rendering the FCC's preliminary audit results unreliable. Conclusions should not be drawn with respect to the fair presentation of Ameritech's hardwired COE investment based on the procedures performed by the FCC staff. The impacts of the above results on the extrapolated error amount contained in the FCC's draft report are summarized as follows:

	Extrapolated Error	Revised
Revised Count	per FCC	Extrapolated Error
Number of Items "Not Found"	140	108
Dollar Amount of Items "Not Found"	\$936,046	\$516,287
Extrapolated Error (Point Estimate)	\$358.1 Million	\$182.6 Million
Variance of Extrapolated Error	+/- \$125.6 Million	+/- \$88.9 Million
Low-End of COE Estimated Error	\$232.5 Million	\$93.7 Million

Because of a number of issues involving the FCC's sample design, implementation, technique and logic, there is no basis to extrapolate beyond the lower bound of the point estimate of \$93.7 million.

For a detailed discussion and analysis of sampling and related extrapolation issues, refer to the affidavit of Paul F. Charnetzki included as Appendix A-5 (the "Charnetzki affidavit").

Workpapers supporting the conclusions reached in this affidavit can be provided upon request.

CONCLUSION

In conclusion, our physical verification proconclusions in several instances from those reacher resulted in a reduction in the extrapolated error and FCC's draft audit report. We believe that our proconclusions justified. However, these results alone overstatement in the Company's COE plant invest affidavit included in this report.	d by the FCC staff. Such differences mount from that presented in the redures were complete and our e are not indicative of an
I hereby swear, under penalty of perjury, that the best of my knowledge and belief.	e foregoing is true and correct, to the
_	Carl R. Geppert
Subscribed and sworn to before me this 8th day of 3	January 1999.
-	Notary Public

Affidavit of Paul F. Charnetzki

I, Paul F. Charnetzki, declare and state as follows:

- 1. I am a Partner in the Economic and Financial Consulting Division of Arthur Andersen LLP ("Arthur Andersen"). A copy of my curriculum vitae is attached hereto as Attachment 1.
- 2. I have been retained by Ameritech to offer my opinions on statistical issues relating to the Federal Communications Commission's (the "FCC") draft report of its <u>Audit of the Continuing Property Records of Ameritech As of July 31, 1997</u> (the "FCC Draft Report").
- 3. I have undertaken this engagement solely as an agent of Ameritech and have received and handled information contained in and in support of the FCC Draft Report pursuant to the Non-disclosure Commitment.
- 4. I have been asked by Ameritech to address the FCC's sampling methodology, its accuracy and its extrapolation of Ameritech's Hard-Wire COE investment.
- 5. My opinions contained herein are based upon, but not limited to, the following information: (1) the FCC Draft Report; (2) Ameritech's population data, which was also provided to the FCC in electronic format; and (3) the sample data derived by the FCC and put into electronic format by Ameritech.
- 6. I have reviewed the FCC Draft report and have concluded the following:
 - (a) The FCC excludes all offices that have less than 100 records in them from the population. It is highly unlikely, then, that the audit sample is representative of the true population even before the FCC adopts a sampling procedure. It is impossible to determine if the population chosen by the FCC is appropriate for the given objective.
 - (b) On page 3 of the FCC Draft report, the FCC claims that they have "selected a random two-stage stratified sampling plan." However, since the FCC provides no evidence of systematic differences in the probability of finding a record or in the average missing dollar value by stratum, it makes no sense to perform a stratified sample. Further, the FCC makes use of weighted estimators, however, the unweighted estimators are more efficient in the absence of systematic strata differences. What is more troubling is that the FCC has, in fact, chosen a cluster sample -- NOT a stratified sample. As such, the FCC initiates its analysis with a flawed sampling methodology that it does not correct for. In cluster sampling, the units of the population are often found in close geographic clusters (e.g. central office locations in this case). Cluster sampling is attractive when a population can conveniently be subdivided into relatively small, geographically compact units. In cluster sampling, a simple random sample of clusters is selected from the population, and a random sample of items (or every item) in each of the sampled clusters is chosen. Inferences for cluster sampling can be made with relatively little prior information about the population. It is clear that the FCC, then, has performed cluster sampling while erroneously calling the sample a stratified sample.

- (c) Given that the FCC has chosen a cluster sample, the variance calculation it uses in its report is inaccurate. In fact, it is too small. Cluster sampling does have a superficial resemblance to stratified sampling since both methods divide the population into subgroups. However, in cluster sampling a random sample of clusters is taken, so that some clusters will have no members in the sample. Since within clusters, population members will probably be fairly homogeneous, the danger is that important subgroups of the population may be either not represented at all or grossly underrepresented in the final sample. The FCC variance formulas for the missing costs rely on being able to estimate the variance across offices within a cluster. But seven out of ten clusters have at most three offices; this means these variance estimates are very imprecise. In consequence, additional imprecision is imposed on the sample estimates (i.e. mean and variance estimates). This imprecision contributes to a wider variance in the FCC's estimates. With the best possible experience, the FCC cluster sample would resemble a random sample.
- (d) The FCC's sample has another critical flaw in its design which introduces additional bias into its sample. The FCC Draft Report asserts that Ameritech overstates the value of its equipment because some equipment is listed on its books, but is not found in a physical audit. However, the FCC auditors never found, or even looked for, physical equipment that is not listed on the books but physically exists at the central office. The FCC designed their sampling method as a binomial (discrete) experiment (i.e. is the item found or not found), instead of a numerical (continuous) experiment. If the books say there are, for example, 100 pieces of equipment and the auditors found 100 pieces, then there is no effort to prove that there are not even more than 100 pieces of equipment actually in use. The audit found only one type of error in the books -- overreporting -- and made no attempts to find the second type of error -- underreporting -- that could exist at the same time. The net effect of reporting accuracy cannot be determined without estimating both types of errors. Most of the items that the FCC identifies as an error may be a simple result of inaccuracies in the processing and fulfillment of work orders related to retirement of equipment. For example, suppose Ameritech owns two pieces of equipment, A and B, and the work order for the retirement of A is incorrectly prepared for B, then the FCC would identify A as missing (because the books would not have it identified as retired) and make no effort to identify B (which would be listed on the books as retired).
- (e) The final and perhaps the most critical flaw in the FCC's sample relates to the accuracy of the sample results themselves. Had the FCC performed an accurate audit, I would have expected all line items the FCC could not find to be nonexistent. This, however, is not the case. Upon closer examination by Arthur Andersen, many of the line items the FCC claimed not to exist, do, in fact exist. This fact alone introduces an incalculable degree of error into the sample results.
- (f) Due to the nature of the FCC sampling design and implementation errors, the sample the FCC creates is not designed so that one can extrapolate reliable conclusions to the population. Despite these flaws, I have

recalculated the statistical estimators that the FCC provides in their Draft Report using information from Arthur Andersen's Adjusted sample and the combined Arthur Andersen/Ameritech Adjusted sample together with, corrections to the FCC's methodology. Specifically, I stratify the sample based on in-place costs to take into account the expectation that high dollar items will be easier to find and track then low cost items. The table below displays my results for the adjusted samples and methodology.

Recomputed Estimators Assuming

Combined Arthur Andersen/Ameritech Adjusted Sample and Arthur

Andersen Adjusted Sample

Post-Stratified based on Dollars

	Recomputed	Recomputed	Original Estimators
	Estimators	Estimators	(per FCC report)
	(Combined Arthur	(Arthur Andersen	
	Andersen/Ameritech	Adjusted	
	Sample)	Sample)	
Proportion of correct			
items in the population	77.84%	76.70%	75.78%
Standard deviation of			
correct items in the			
population	1.20%	1.22%	0.96%
95% Confidence Interval			
for proportion of correct			
items in the population	$77.84\% \pm 2.36\%$	$76.70\% \pm 2.40\%$	$75.78\% \pm 1.88\%$
Estimated cost of missing			
Hard-Wire COE	\$182.6 million	\$194.2 million	\$358.1 million
Standard deviation of			
estimated cost of Hard-			
Wire COE	\$45.3 million	\$46.4 million	\$64.1 million
95% Confidence Interval			
for estimated cost of			
missing Hard-Wire	$$182.6 \pm 88.9$	\$194.2 ± 91.0	$$358.1 \pm 125.6$
equipment	million	million	million

(g) In conclusion, I have observed a high degree of uncertainty within the FCC sample as it relates to design, implementation, technique and logic. The most troublesome of which are the errors Arthur Andersen discovered while reperforming certain aspects of the audit. As a result of the above concerns, I

- find no basis to extrapolate beyond the lower bound of the point estimate of \$93.7 million.
- (h) I have included as Attachment 2 (1) anomalies found in the data; (2) my analysis regarding the sampling results assuming a random sample; and (3) discussion and computation of Arthur Andersen's sampling methodology. I declare under penalty of perjury that the foregoing is true and correct and this declaration was executed in Chicago, Illinois on August 25, 1998.

I declare under penalty of perjury that the foreg declaration was executed in Chicago, Illinois on	
	Paul F. Charnetzki
	Tuuri Charletzki
Sworn and subscribed to before me on this 8 th day of January 1999.	

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I, Larry C. Maggiefield have been employed by Ameritech-Illinois as an Engineer, Network Services for thirty years. My responsibilities have included the engineering and deployment of analog switching equipment, digital switch equipment, and toll carrier equipment. I have expert knowledge on investment categorized as undetailed investment with CPR number 040000. The following analog equipment items are indispensable and necessary components for the operation of the analog switch and must be placed in service during the initial installation of an analog switch:

Equipment Description	J Number
Call and Program Stores Frames Central Controls Frames	J5A010A J5A005B1
Line Net Frames	J1A081A &
Junctor Grouping Frames	J1A079A J1A085A
Input Output Frames	J5A006D1

Appendix D

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I have physically verified the existence and functionality of the aforementioned equipment items at Ameritech Illinois' Stewart central office located at 233 West $76^{\rm th}$ Street, Chicago, Illinois.

I hereby swear, under penalty of perjury, that the foregoing is true and correct, to the best of my knowledge and belief.

_____S

Larry C. Maggiefield

Subscribed and sworn to before me this 25^{th} day of August 1998.